The background features a light gray gradient with several realistic water droplets of various sizes scattered across the surface. In the center, there is a faint, circular silhouette of a human brain.

ALCOHOL AND BRAIN INJURY

THE INFLUENCE
OF ALCOHOL ON
BRAIN AND SPINAL
INJURY

REHABILITATION MEDICINE

Rehabilitation seeks to re-establish a meaningful and satisfactory life



DEMOGRAPHICS AND ACTIVITY

Of the 210 patients that received inpatient rehabilitation services in 2017:

93

(44%) had a diagnosis of Stroke

48

(23%) had a diagnosis of Non-traumatic Brain Injury

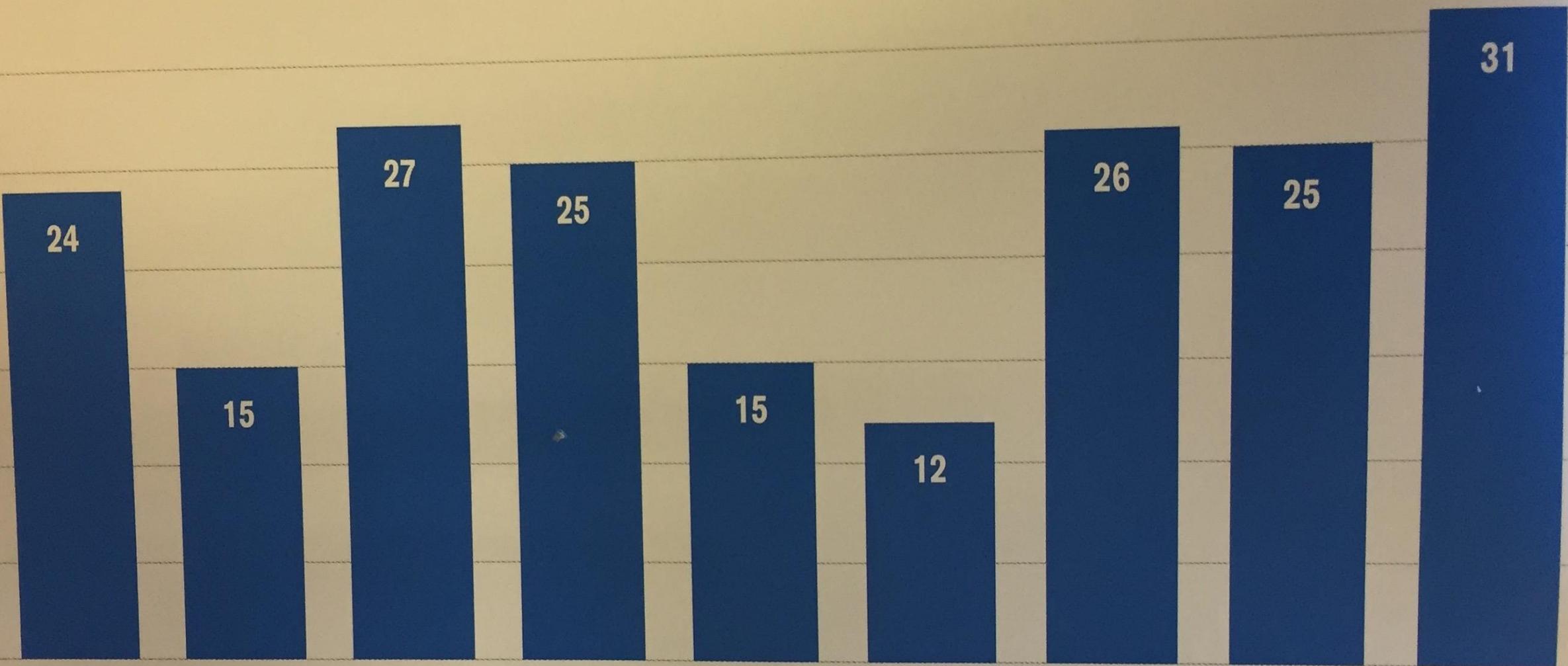
59

(28%) had a diagnosis of Traumatic Brain Injury

10

(5%) had a diagnosis of other Neurological Conditions

PRE-HOSPITAL HSE AREAS OF RESIDENCE OF INPATIENTS SERVED BY THE BI PROGRAMME IN 2017



**CHO
Area 1**

**CHO
Area 2**

**CHO
Area 3**

**CHO
Area 4**

**CHO
Area 5**

**CHO
Area 6**

**CHO
Area 7**

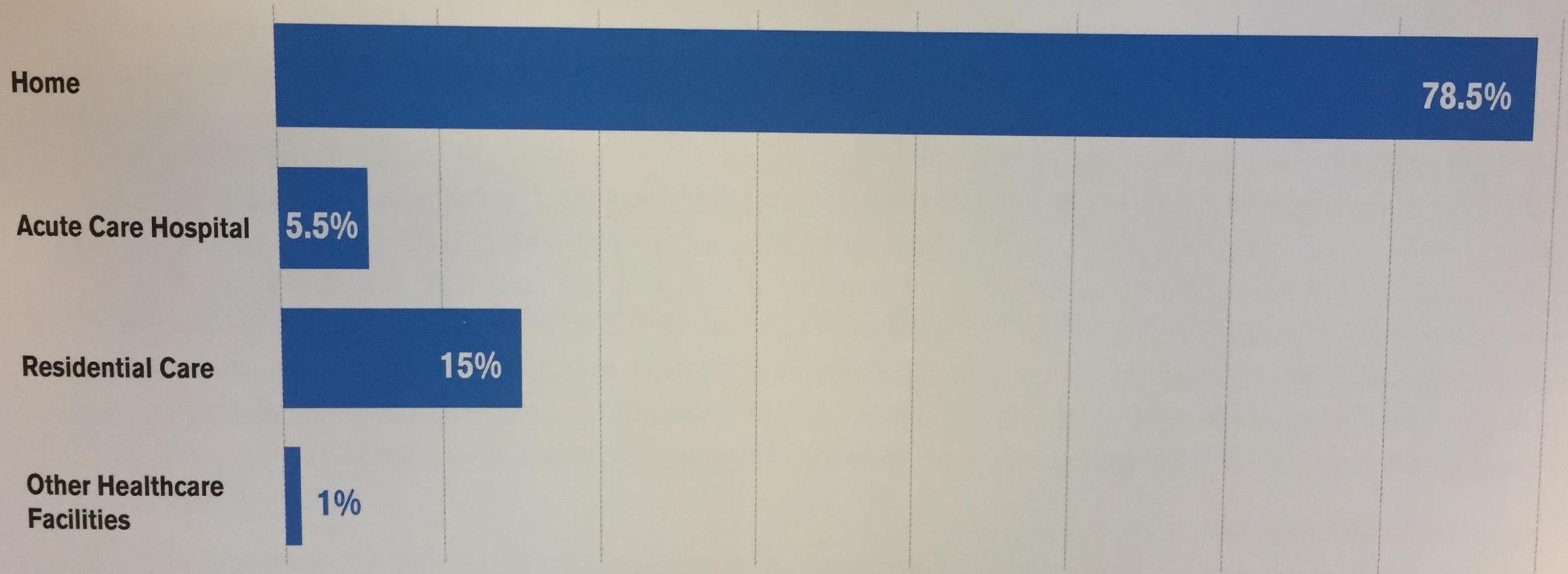
**CHO
Area 8**

**CHO
Area 9**

Outcomes

EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE DAY PROGRAMME

DISCHARGE LOCATION OF INPATIENTS SERVED BY THE BI PROGRAMME IN 2017





ALCOHOL AND BRAIN INJURY

Falls and bleeds

Fights fuelled by alcohol

Alcohol involved in 32%
fatal motor vehicle crashes
in USA 2006

Alcohol involved in over
half of TBIs (Craig
Hospital Denver)

Does alcohol usage affect
outcome

Depression with Alcohol

Recovery from brain injury can occur over many years

Alcohol can slow recovery

Alcohol lowers the seizure threshold

Avoiding alcohol can reduce the risk of developing seizures

ALCOHOL AND BRAIN INJURY

ALCOHOL AND MOOD

Depression is about
8 times more
common in first
year after TBI

Alcohol can reduce
the effectiveness of
antidepressants

Best to avoid
alcohol in
depression

ALCOHOL AND DRUG TAKING: NRH WARD SURVEY

- 69 case records
- NRH ward 2014
- Retrospective study
- Dr Paul Carroll

- 11%. Chronic Alcohol excess recorded
- 5%. Significant alcohol and drug history
- 84% No excess recorded

- Onward care services more difficult to access
- Family supports worn out
- Discharge challenges

ALCOHOL AFTER BRAIN INJURY

FACT: Between 30 -50% were injured in USA while they were drunk.

Advice: Craig Hospital – can interfere with meds, up risk seizures, reduce concentration, reduce recall, impairs self control, risk of further TBI

Advice: Model Systems Knowledge Translation (MSKT)

ALCOHOL AND SPINAL CORD INJURY

Traumatic Spinal Cord Injury 2016 Ireland

22% cases - Alcohol involved

CASE HISTORY 1

- 58 YEAR OLD MAN
- FALL AFTER ALCOHOL – CHRONIC ALCOHOL PROBLEM – ESTRANGED FROM FAMILY
- EXTENSIVE BRAIN TRAUMA
- SEVERE SHORT TERM MEMORY IMPAIRMENT
- GOOD PHYSICAL RECOVERY
- LACKS INSIGHT INTO DEFICITS
- WILL HOME BE POSSIBLE

CASE HISTORY 2

- YOUNG MAN OUT DRINKING WITH PALS
- ALTERCATION WITH PASSING AGGRESSIVE ELEMENTS -
- SKULL FRACTURE – LOSS OF CONSCIOUSNESS – LOSS OF HEARING RIGHT EAR
- NEUROSURGICAL EVACUATION OF EXPANDING BRAIN HAEMATOMA.
- GOOD RECOVERY – NRH FOCUS ON COMMUNICATION AND RETURN TO WORK

COMMON STUFF: MTBI DEFICITS

KEY POINTS

The most common acute, sub acute, and chronic disabilities seen after mTBI are Neurosensory.

Dizziness and headaches are the most common disorder seen after mTBI.

Specialized balance tests may be the best way to diagnose mTBI.

Despite advances in the area of mTBI, more work in the area of diagnosis and treatment continue to be necessary.

TRAUMA PATHWAYS

- IS IT POSSIBLE TO REDUCE SERVICE OVERLOAD?
- COULD WE REDUCE THE INFLUX OF NEW PATIENTS.
- LESS ALCOHOL
- FEWER FALLS
- FEWER RTAS
- FASTER EMERGENCY SERVICES
- NEUROSURGICAL TRANSFER
- SEAMLESS CARE - DEVELOP A CLEARLY DEFINED PATHWAY FOR ALL ABI SURVIVORS